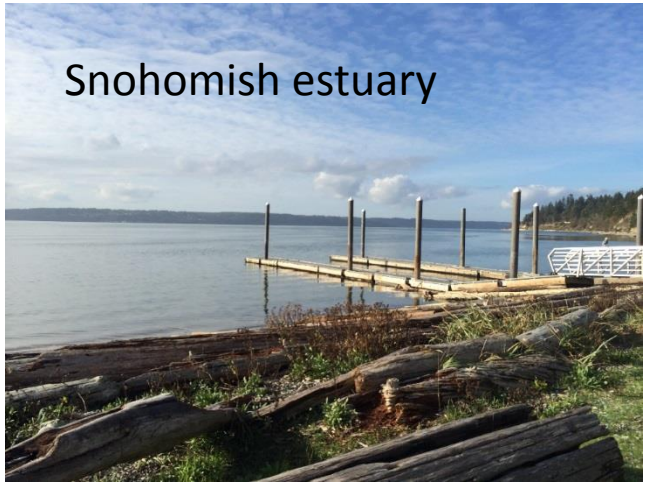
Puget Sound RARE Project – Region 10

Pre deployment of pCO2 and pH instrumentation

Toward a Unified Understanding of Coastal Acidification Processes in Puget Sound: Exploring synergies between cultural eutrophication, ocean acidification, & natural variability in critical nearshore environments.



Field test of "benthic lander" instrument package for continuous measurement of carbonate chemistry and dissolved oxygen

Collaboration of ORD, Region 10, Tulalip Tribes, & Oregon State University

Study Objectives and Approach

The **objectives** of this study are to quantify the:

1) Variability of nearshore carbonate chemistry and oxygen dynamics.
2) Relative contributions of natural versus anthropogenic nitrogen fueling nearshore primary production.

Methods:

In situ carbonate chemistry & oxygen measurements

Stable isotope of dissolved inorganic nitrogen and dissolved inorganic carbon.

Stable isotopes (C & N) of primary producers and shellfish.

Sampling in shellfish beds and end members.